

## **Remarks**

Claims 7, 9, 11, 13, and 16 are pending in this application. Non-elected claims 9 and 11 are cancelled herein without prejudice to or disclaimer of the underlying subject matter. Claim 7 is amended herein to recite that the first and second DNA molecules must have at least eleven nucleotides (see Specification, for example, at page 9, lines 28-29) and to recite that the first DNA molecule is selected from maize genomic flanking DNA sequence consisting of contiguous nucleotides 1-304 and the second DNA molecule is selected from the insert DNA sequence consisting of contiguous nucleotides 305-498 (see Specification, for example, at page 12, lines 24-28). Claim 13 is amended herein to recite an “artificial” DNA molecule selected from the group of sequences listed in Markush format. Basis is found, for example, in Sequence Listing pertaining to the respective sequences. Claims 17-19 are newly added based on the specification, for example, at page 9, lines 28-29. Claim 16 remains unchanged. Upon entry of these amendments, amended claims 7 and 13, new claims 17-19, and original claim 16 will be pending.

### **1. Restriction/Election**

Applicants acknowledge the finality of the restriction requirement but maintain the traversal. To facilitate prosecution, however, Applicants have cancelled the non-elected claims 9 and 11 from the application.

### **2. Status of Application**

Applicants acknowledge with appreciation the entry of the Preliminary Amendment of March 1, 2004 canceling claims 1-6, 8, 10, 12, 14-15. With the cancellation herein of claims 9 and 11, only claims 7, 13, and 16-19 are pending and subject to examination.

### **3. Information Disclosure Statement**

Applicants acknowledge the entry and consideration of Information Disclosure Statement filed on August 5, 2004.

#### 4. Priority

Applicants acknowledge and thank the Examiner for reiterating the priority status of the current application.

#### 5. Claim Rejections – 35 USC § 101

The Office Action rejected claim 13 because the claimed invention was directed to non-statutory subject matter and suggested that an amendment to recite isolated or purified DNA molecules would obviate the rejection. Office Action at page 3. The Examiner's suggestion is appreciated and the claims are amended to recite an "artificial" DNA molecule. Reconsideration and removal of the 35 USC § 101 rejection is respectfully requested.

#### 6. Claim Rejections – 35 USC §112

The Office Action rejected claim 13 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Office Action questioned whether the recited SEQ ID No. referred to DNA molecules selected from "sequences comprising recited SEQ ID No". or "sequences consisting of said SEQ ID No." Claim 13 has been amended to recite "an artificial DNA molecule selected from the group of sequences consisting of SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, and complements thereof." Reconsideration and removal of the 35 USC 112, second paragraph rejection of claim 13 is respectfully requested.

#### 7. Claim Rejections – 35 USC § 102

A. The Office Action rejected claim 7 under 35 U.S.C. 102(b) as being anticipated by Sigma Catalog (Molecular Biology Products, Oligonucleotides, page 1565, 1997). In particular, the Office Action pointed out that there could be a subset of hexanucleotide primers in Sigma's hexamer oligonucleotides that would fall within original claim 7 because the original claim did not specify the length of the primers and probes. Claim 7 has been amended to incorporate the limitation of "at least 11 nucleotides in length."

This amendment is supported by the disclosure, for example, on page 9, lines 28-29 in the instant specification. Further, dependent claims 17-19 are added which are supported, for example, at page 9, lines 28-29 in the specification. Reconsideration and removal of the 35 USC 102 rejection of claim 7 over the cited portions of the Sigma catalog is respectfully requested.

B. Claim 7 was further rejected under 35 U.S.C. 102(b) as being anticipated by McElroy et al. (USPN. 5,641,876) ('876). The Office Action cited two DNA molecules (SEQ ID NOs. 4 and 5) of the '876 patent as a pair of DNA molecules that would fall within the original claim 7. McElroy et al. at col. 8, lines 18-22 discloses that the cited molecules, encompassing the respective regions identical to bases 356-425, represent the rice actin 1 promoter. However, claim 7 specifies SEQ ID NO: 7 which represents an insertion junction sequence as disclosed, for example, in the paragraph bridging pages 20 and 21 of Applicants' specification, as well as in the sequence listing of SEQ ID NO: 7. This insertion junction sequence consists of 304 base pairs (bp) of the flanking maize genomic DNA sequence (nucleotides 1-304 of SEQ ID NO: 7), 45 bp of pMON25496 insert DNA sequence (nucleotides 305-349 of SEQ ID NO: 7) and 149 bp of DNA sequence of the 5'end of rice actin 1 promoter (nucleotides 350-498 of SEQ ID NO: 7). Claim 7 has been amended to require a first DNA molecule from bases 1-304, that is, the maize genomic (non-actin 1 promoter) region, and a second DNA molecule from bases 305-498 of SEQ ID NO: 7. Support for the aforementioned amendment could be found in the Specification, for example, on page 12, lines 24-28 and page 21, lines 24-26 wherein the recited SEQ ID NO: 13 and 14 correspond to 5'- (maize genomic flanking DNA) and 3'-end (insert DNA) of SEQ ID NO: 7, respectively. McElroy does not disclose or suggest using a first molecule selected from the specified maize genomic region in addition to a DNA molecule such as is suggested by McElroy. Reconsideration and removal of the 35 USC 102 rejection over McElroy is respectfully requested.

C. The Office Action also rejected claim 7 under 35 U.S.C. 102(e) as being anticipated by Barry et al. (USPN. 6,448,476). The Office Action stated that "Barry et al. teach a pair

of DNA molecules of claim 7 comprising sufficient length of contiguous nucleotides of SEQ ID No. 7 (see sequence alignment for a sufficient length of contiguous nucleotides of SEQ ID No. 7 with a fragment position 1-202 of SEQ ID NO. 27 (first DNA molecule) and with a fragment 2239-2378 of SEQ ID No. 27).” The cited regions of SEQ ID NO. 27 of the Barry et al. patent correspond to the promoter region and terminator region of an artificial expression cassette. By amending claim 7 herein to require a first DNA molecule selected from a maize genomic flanking DNA sequence, claim 7 is distinguished over Barry et al. Reconsideration and removal of the 35 USC 102(e) rejection over Barry et al. is respectfully requested.

Claim 16 was also rejected by the Office Action as being anticipated by Barry et al. based on the citation “Barry et al. also teach a kit comprising DNA molecules (see column 7, line 1-10).” The pertinent paragraph of Barry et al. reads

“Other aspects also include reagents such as antibodies directed to AMPA acyltransferase, and polynucleotides for use in identifying acyltransferase gene sequences. These reagents can be included in kits containing AMPA acyltransferase, polynucleotides which are or are complimentary to an AMPA acyltransferase gene sequence, polynucleotides for use in thermal amplification of an AMPA acyltransferase gene sequence, antibodies directed to AMPA acyltransferase for the detection of AMPA acyltransferase in the laboratory or in the field, and any other reagents necessary for use in kit form as well as for use in other assays contemplated herein.”

However, SEQ ID NO: 7 and SEQ ID NO: 8 are insertion junction sequences of corn event PV-ZMGT32(NK603) comprising partial rice actin 1 promoter or *Agrobacterium tumefaciens* nos 3'-terminator sequences, construct vector DNA, and corn genomic flanking DNA. By the recitation of a “sufficient length of contiguous nucleotides homologous or complementary to SEQ ID NO:7 or SEQ ID NO:8 that functions as a DNA primer or probe specific for corn event PV-ZMGT32(nk603)”, claim 16 distinguishes over Barry et al. on column 7, line 1-10 which relates to identifying AMPA acyltransferase gene sequences encoding an AMPA acyltransferase. It is apparent that SEQ ID NO: 7 (and SEQ ID NO:8) do not have the AMPA acyltransferase gene

sequence of the detection kit in Barry et al. and moreover that any sequence selected from the AMPA acyltransferase gene sequences of Barry et al. cannot be a probe or primer “specific for corn event PV-ZMGT32(nk603)”. Reconsideration and removal of the 35 USC 102(e) rejection of Claim 16 is respectfully requested.

D. The Office Action rejected claim 13 under 35 U.S.C. 102(b) as being anticipated by Marra et al. (EST, 1996). Applicants acknowledge and thank the Examiner for pointing out that the rejection is based on the earlier rejection under 35 USC 112, interpreting the claim as open language “comprising” format, that is, sequence comprising the claimed SEQ ID NO.11. Applicants have amended the claim to further clarify that the claim is drawn in a closed “consisting of” format, and it is believed that this rejection has been overcome in light of this amendment to claim 13. Reconsideration and removal of the 35 USC 102(b) rejection of claim 13 over Marra et al. is respectfully requested.

With the above amendments to the claims and remarks, it is believed that the claims as amended are in condition for allowance. Should any questions arise or if Applicants or Applicants’ attorney can facilitate the examination of this application, it is respectfully requested that the PTO contact the undersigned attorney.

Respectfully submitted,



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